

UNITED STATES DEPARTMENT OF AGRICULTURE  
FOREST SERVICE  
Forest Insect & Disease Management  
P.O. Box 5895, Asheville, NC 28803

Report No. 77-1-15

5230  
June 8, 1977



Mr. Kenneth Hulick  
Resource Management Biologist  
Southeastern Regional Park Service  
1895 Phoenix Boulevard  
Atlanta, GA 30349

Dear Ken:

On June 2, 1977, Iral Ragenovich and John Ghent, entomologists, Forest Insect and Disease Management, conducted an evaluation of insect problems on Fort Frederica National Monument, St. Simons Island, Georgia. They were met and assisted by Janet Wolfe, Superintendent; George Brendt, Chief Ranger; and Jim Riley.

Fort Frederica National Monument contains approximately 210 acres. Part of the 110 forested acres is maintained intensively for visitor use. Most of the trees in the Park are large old live oaks and loblolly pines. Last year some trees identified as having been killed by southern pine beetle were removed and treated with benzene-hexachloride (BHC). In March, this year, personnel from the District Office of the Georgia Forestry Commission contacted the Park and again informed them that they had three or four additional trees killed by southern pine beetle. These trees were removed and treated with BHC by Park personnel and buried at the city landfill.

No evidence of southern pine beetle, Dendroctonus frontalis Zimm., was found on Park grounds on this trip. There was one large dead pine behind the barracks area. It had been attacked heavily around the base by black turpentine beetle, D. terebrans Oliv., however, a lightning strike was the cause of the trees' death and no doubt created the attraction for the beetle. About three other trees around the lightning-struck tree had also been attacked by black turpentine beetle. This bark beetle often does not kill the trees it attacks; however, if the trees are unhealthy or the beetle attacks heavy enough, it can result in the death of the tree. Since severe thunderstorms are not uncommon for that area, lightning strikes probably initiated the previous bark beetle attacks as well.

Several pecan trees in the Park contained fall webworm, Hyphantria cunea Drury, nests on the ends of some of the branches. The caterpillars defoliate the ends of the branches, but this will not cause the death of the tree. The major drawback to this insect is the unsightly web nest.

Two of the pines had fusiform cankers at the base of the trees. The trees were declining as evidenced by the thin, unhealthy crowns. Park personnel should watch these trees closely. The trees will eventually die, and they may be a source for bark beetle attack or exist as a hazard, especially during high winds which may cause the trees to break at the site of the canker.

Aerial observations of the Park showed only the dead black turpentine beetle attacked tree on Park lands. There was one spot of three red topped trees and another single red topped tree near a dirt road east of the Park.

#### Recommendations

Black turpentine beetle - The dead tree should be removed from the standpoint of safety. The remaining attacked trees should be sprayed with a solution of 1.0 percent lindane in diesel oil or water. Trees should be sprayed 6 to 8 feet up the bole, and the duff brushed back and the bole sprayed as far down as possible. Spray should be applied to the point of runoff. Diesel oil is slightly phytotoxic, so in areas where there are lawns or ornamentals the water solution may be preferred. Caution should be taken to follow the instructions on the label.

Fall webworm - The ends of the branches containing the webworm nests should be pruned off and burned. This should be done before the mature larvae begin leaving the nests. Fall webworm has several generations per year, so if they appear again later in the summer the same action should be taken.

The entomologists and pathologists of FI&DM serve as the technical advisors for all Federal lands by authority of the Forest Pest Control Act of 1947. When questions arise involving insect or disease problems on National Park lands, we should be contacted for identification of the pests and to insure proper recommendations, especially in the use of pesticides.

Enclosed for your information is a listing of FI&DM personnel who are available to assist you. If you or any of your Park personnel have any questions, please feel free to contact us

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at the address or phone numbers listed on the enclosure.

Sincerely yours,

A handwritten signature in cursive script, reading "Harold W. Flake".

HAROLD W. FLAKE  
Field Office Representative

Enclosure

cc: Toko

ASHEVILLE FIELD OFFICE

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